

THE RATIONAL TREATMENT

15

OF

ANTERIOR AND POSTERIOR DISPLACEMENTS

OF

THE UTERUS.

BY

ARTHUR V. MACAN,

B.A., M.B., M.CH., AND M.A.O., UNIV. DUBL.

Reprinted from the Dublin Journal of Medical Science—July, 1882.

DUBLIN :

PRINTED FOR THE AUTHOR

BY JOHN FALCONER, 53, UPPER SACKVILLE-STREET.

1882.

THE RATIONAL TREATMENT
OF
ANTERIOR AND POSTERIOR DISPLACEMENTS
OF
THE UTERUS.^a

THERE is probably no subject in the whole range of gynæcology about which so many and so conflicting opinions have been held as the right method of treating anterior and posterior displacements of the uterus. Thus some authorities, like Dr. West, hold that the displacement *per se* requires little or no treatment, provided we remove the complications. He says:—"The principle upon which I usually act in the management of these cases amounts pretty nearly to this—that, to the best of my power, I take care of the general symptoms, and leave the displacement to take care of itself."^b Others, of whom Dr. Graily Hewitt may perhaps be taken as a type, lay the greatest stress on the displacement, which they look on as the *fons et origo* of all the accompanying symptoms; while recently a third theory has been put forward by Professor B. S. Schultze, of Jena, that in the large majority of anterior displacements the chief indication is to treat the complication, while in most cases of posterior displacement the primary indication is to treat the displacement. When I first undertook to write this paper I had intended to examine the whole question, but I soon found that the subject was far too large to be satisfactorily treated within the limits of an ordinary paper, and I intend therefore to confine my observations this evening to one or two points, the elucidation of which seems to me to be absolutely necessary before there can be anything like a rational treatment of uterine displacements.

Before entering into any inquiry as to the best way of treating displacements of the uterus, we are naturally first called on to determine what the normal position of the uterus is. For without settling what is normal, we have no standard by which to judge or determine what is abnormal. What are, then, the views most generally held as to the

^a Read before the Dublin Obstetrical Society, May, 6, 1882.

^b Diseases of Women. 4th Ed., p. 213.

normal position of the uterus? Thomas says the normal position of the uterus "is one of slight anteversion, the axis of the body corresponding with that of the superior strait, which is a line running from the umbilicus, or a little above it, to the coeeyx. . . . The degree of this forward inclination may be so increased by slight causes as to constitute a morbid state;"^a and he further looks on all flexions as pathological. Dr. Barnes says:—"Assuming, however, as we may, that the uterus is suspended in the upper part of the pelvic cavity, so that its fundus is on a level with the plane of the pelvic brim, that its inclination coineides nearly with the axis of the pelvie inlet, and that it floats between bladder and reetum, about midway between the symphysis pubis and the sacrum, but somewhat nearer to the symphysis, we shall have a standard position suffieiently defined for clinieal purposes."^b A slight degree of anteflexion must, he thinks, be considered normal, but he is disposed to infer "that anteflexion rarely fails to entail trouble."^c Graily Hewitt holds that normally the uterine canal "passes at first upwards in the direection of the pelvie axis, but higher up there is a slight inclination forwards;"^d and Dr. Meadows believes that the uterine canal is "straight through its course, its axis being identieal with that of the pelvie brim or inlet."^e They all allow that the uterus has a certain degree of mobility, and some think a slight degree of anteflexion is normal; but they agree that if, in making a vaginal examination, the fundus can plainly be felt in the anterior *cul-de-sac*, this constitutes pathological anteflexion or version. But, for all practical purposes, we may take the diagram I now show you (Fig. 1), which is eopied from Graily Hewitt's work on "Diseases of Women" (p. 55), as representing the ordinarily reeceived opinion as to the normal position of the uterus—viz., that the canal of the eervix and the eavity of the uterus form very nearly a straight line, and that the position of the axis of the uterus eoineides nearly with a line drawn from the sacrovertebral angle to the anus; the uterus itself being thus plaeced very nearly perpendicularly in the pelvis—the exact amount of normal mobility of the fundus being estimated at $1\frac{1}{2}$ inches.

Such was the position of affairs when Sehultze first put forward his views as to the normal position of the uterus, and as to the proper treatment of anterior and posterior displacements.^f He holds that the normal position of the uterus, when the bladder is empty, is one of anteflexion—

^a Thomas. *Diseases of Women*. 4th Ed., p. 359.

^b Barnes. *Diseases of Women*. 1st Ed., p. 669.

^c *Ib.*, p. 681.

^d Graily Hewitt. *Diseases of Women*. 3rd Ed., p. 68.

^e *Lancet*. 1868. Vol. II., p. 71.

^f *Volkmann's Sammlung*. Nos. 50 and 176. I regret that I did not receive Prof. Schultze's lately published book on "Uterine Displacements" till too late to enable me to notice it in this paper.

the anterior wall of the uterus being nearly parallel to the anterior vaginal wall. The fundus lies supported on the empty bladder, while the cervix is suspended from the second bone of the sacrum by the folds of Douglas, which contain some unstriped muscular fibres, named by Luschka the *musculi retractores uteri*. As the bladder becomes filled, it gradually lifts the fundus upwards and backwards; and as it is emptied, the fundus follows it downwards and forwards—this being, in the upright position, in part due to the action of gravity, but chiefly to the intra-abdominal pressure, acting on the posterior surface of the uterus. Normally, therefore, the uterus is in a constant state of motion, the fundus rising and falling with the varying amount of urine in the bladder. Professor Schultze^a has measured the angle through which the fundus moves during the emptying of a full bladder, and found it 48° . We cannot, therefore, speak of any one position of the uterus as the normal one. Indeed when the uterus, from any cause, becomes fixed and unable to follow the changing shape of bladder, this is a pathological condition. The most frequent cause for pathological ante flexion is, according to Schultze, a shortening of Douglas's folds from inflammation, by which the cervix is drawn upwards towards the second bone of the sacrum. This inflammation of Douglas's folds is called by him *parametritis posterior*.

Fig. 1. Normal Position of the Uterus (Graily Hewitt).



^a Centralbl. f. Gynaek. 1878. P. 241.

These views, which at first met with great opposition, have gradually been adopted by most modern gynæcologists. Thus Fritseh^a takes them with some slight modification as the basis of his work on "Uterine Displacements." He thinks that the normal position of the uterus when the bladder is empty is one of well-marked ante flexion, the cervix making with the body an angle of nearly 90°, and that the healthy uterus can be flexed backwards and forwards with the greatest ease—rigidity being pathological and due to chronic metritis. The accompanying plate (Fig. 2)

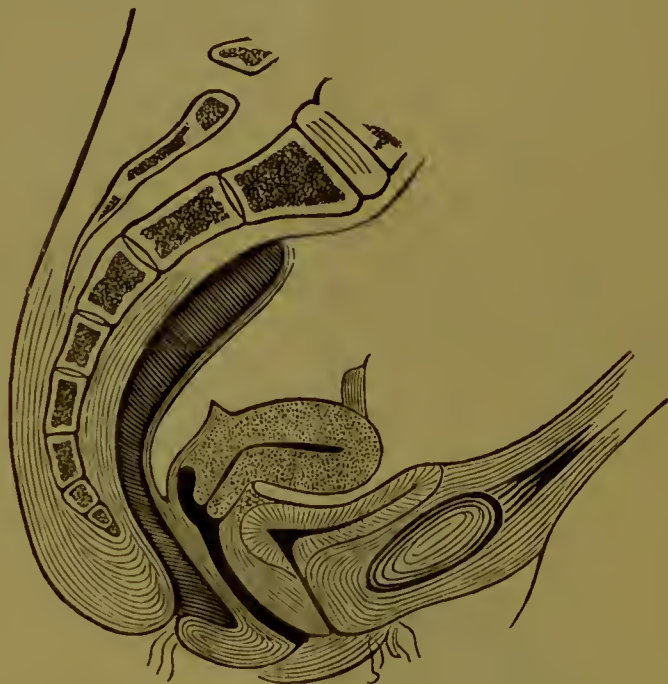


Fig. 2. Normal Position of the Uterus (Fritseh).

is copied from his book,^b and shows this position very clearly. As the bladder becomes filled the angle of flexion gradually decreases, and the anterior wall of the vagina lengthens. As the bladder is emptied the fundus descends again till it comes nearly to rest on the symphysis pubis. He also lays great stress on the change in the position of the uterus according to the position in which we examine the woman. He does not think, however, that the uterus is so much suspended from the second bone of the sacrum by the folds of Douglas as supported from below by the muscular tube of the vagina and by the floor of the pelvis. If any of the ligaments become shortened or rigid, this makes the position of the uterus a fixed one, and is pathological. Thus it is equally

^a Die Lageveränderungen der Gebärmutter, Vol. III. of Billroth's Handbuch der Frauenkrankheiten. Stuttgart: Ferdinand Enke. 1881.

^b Loc. cit. P. 7.

pathological whether the uterus be prolapsed, or retroflexed, or so fixed that it is unable to perform its proper physiological changes of position. If the angle of flexion be less than a right angle, or if neither the distension of the bladder nor the congestion that accompanies menstruation be able to lessen the amount of flexion, then the condition is a pathological one. Thus acute ante flexion is undoubtedly a pathological condition, but it need not necessarily be accompanied by symptoms, any more than crooked legs, which are also pathological, need give rise to symptoms. He agrees with Schultze that this pathological ante flexion is frequently due to shortening of Douglas's folds, but does not think that this shortening is often due to parametritis, but is either congenital or due to inflammation of the peritoneum or perimetritis, and not to inflammation of the cellular tissue or parametritis.

Now, the accuracy of this statement, that the normal position of the uterus when the bladder is empty is one of ante flexion at an angle of nearly 90° , can be readily verified by anyone who will take the trouble of putting it to the test; but the examination must be made bimanually, the patient lying in the dorsal position, and the bladder having been previously emptied, if necessary with the catheter. Indeed, the bimanual examination, to be of any use, must always be made when the bladder is empty. For when the bladder is full it presses the fundus upwards and backwards, and makes it impossible to get it between the two hands; and even when there is only a small quantity of urine in the bladder pressure over it will cause the patient to contract the abdominal muscles, and thus equally prevent us feeling the fundus. It must also be obvious that there can be no possible chance of unanimity as to the normal position of the uterus in any individual case if one person examines in the dorsal position, another in Sims'; one when the bladder is full, another when it is empty. Nor, when we take into account the extreme mobility of the normal uterus, can the sound be looked on as affording anything more than an approximate estimate of its true position.

If, then, the normal position of the uterus when the bladder is empty be one of ante flexion, it cannot be a matter for wonder that most women who suffer from dysmenorrhœa are also found to have ante flexion, for this is only saying that in the large majority of women the uterus is in its normal position. By this, however, I do not for a moment wish to say that there is no such thing as pathological ante flexion or mechanical dysmenorrhœa. The existence of the latter is proved by those cases, rare it is true, where the dysmenorrhœa is cured by passing the sound shortly before a menstrual period; and the former exists whenever the angle of flexion is less than 90° , or is unaffected by the varying size of the bladder, or by the congestion that accompanies menstruation. It also naturally follows that but few cases of ante flexion require mechanical treatment, and if ante flexion be accompanied by symptoms, such as

dysmenorrhœa and sterility, these are generally due to the complications present, and not to the mere displacement.

Furthermore, it is acknowledged at the present day by most gynæcologists that no mere vaginal pessary, such as Thomas's or Graily Hewitt's, has any power to cure an antelexion, whatever effect it may have on an anteversion. If, therefore, we come to the conclusion that an antelexion requires mechanical treatment, we must have recourse either to dilatation or the use of a stem-pessary. In the large majority of cases, however, the symptoms will disappear if the complications are cured, even though the uterus remains acutely antelexed. Indeed, if the pressure of the antelexed fundus on the neck of the bladder be the cause of vesical irritation, we have not mended matters much by substituting the pressure of a Thomas's or Graily Hewitt's pessary for that of the fundus.

So much for anterior displacements. Retroflexion and retroversion need not delay us so long; for I take it there is no question as to their both being pathological conditions which require prompt mechanical treatment. Their diagnosis by the bimanual method, or by the sound, is generally free from difficulty, but the diagnosis of the mere displacement is of little value, as to prognosis and treatment, compared to a thorough appreciation of all the complications that are present.

Now this can most readily be obtained by the bimanual method of examination, which, for this reason alone, should always be preferred to the sound. But its advantages will be even more apparent when we come to consider the treatment. This very generally consists in the introduction of a Hodge's so-called "lever" pessary. I think this term "lever pessary" has contributed more than anything else to confuse the whole subject of the treatment of posterior uterine displacements. For the idea which the term is meant to convey, and does convey, is that the anterior arm of the pessary moves upwards and downwards with the motion imparted to the anterior vaginal wall by the diaphragm, causing the whole instrument to rotate, as it were, on a pivot, so that as the anterior arm descends, the posterior one moves upwards and forwards into the posterior *cul-de-sac*, and so tends constantly to replace the retroflexed fundus.^a

At the present day hardly anyone claims any "lever" action for Hodge's pessary, but still the evil effects of the "lever" theory can be traced through the whole mechanical treatment of posterior uterine displacements. Thus the mode of introducing the pessary corresponded to this theory. If the uterus be retroflexed a sound is passed into the fundus with the concavity backwards. The sound is then turned round so as to raise the fundus out of Douglas's space, and the pessary is introduced either over the sound or after its removal. The posterior arm of the pessary is therefore supposed to press the fundus upwards and forwards, and thus restore the uterus to its normal position, and then keep it there. This is

^a Barnes. Diseases of Women. P. 242.

well illustrated by the accompanying plate (Fig. 3), copied from Dr. Barnes' book on the "Diseases of Women" (p. 242), the dotted line in which shows also the supposed lever action of the pessary.

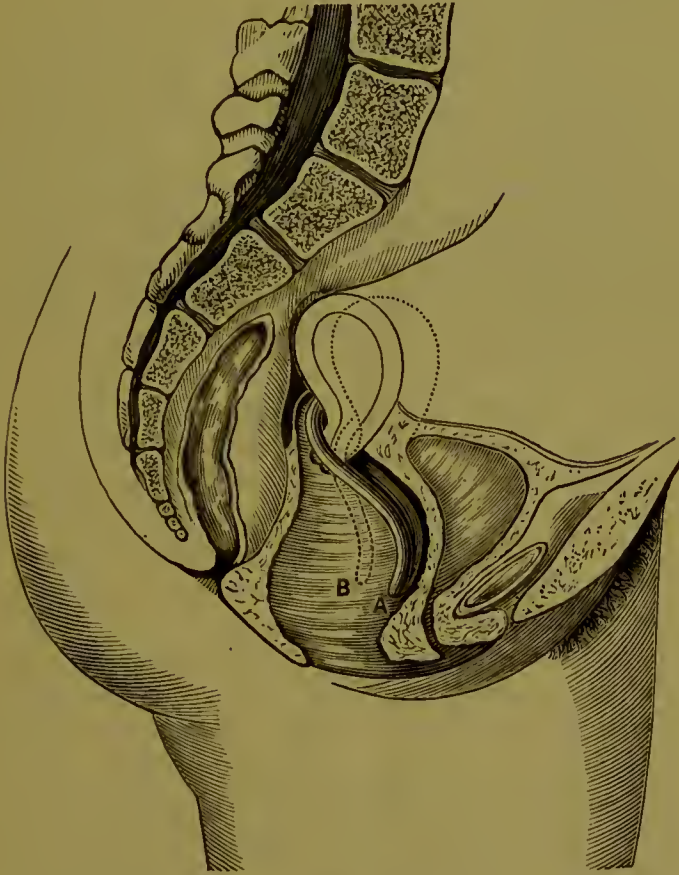


Fig. 3. Hodge's Pessary *in situ*. "Lever" action (Barnes).^a

The uterus is here supposed to be in its normal position, and the fundus is represented as resting on, and being kept in its position by, the posterior arm of the Hodge's pessary. It is obvious to everyone that the intra-abdominal pressure must here strike on the anterior surface of the fundus, and thus tend constantly to force the latter downwards and backwards against the pessary. Under these conditions one of three things is almost certain to happen—1st, Either the fundus presses so hard on the posterior arm of the pessary as to drive the whole instrument out of the vagina; or, 2nd, the fundus slips off to one side of the round posterior arm of the pessary, and in so doing pushes this portion into the opposite side of the pelvis, thus rotating the instrument on its long axis; or, 3rd, if the instrument retains its place, and is neither driven downwards out

^a A very similar plate (omitting the lever action) is given in Graily Hewitt's book, p. 242, and a still more misleading one in Edis on the Diseases of Women, p. 54.

of the vagina, nor caused to rotate on its long axis within the pelvis, it causes so much pain by pressing against the tender fundus that the patient cannot bear to wear it.

Various forms of pessaries have, therefore, been invented to prevent each of these accidents, such as Graily Hewitt's,^a which has a projection at its lower end which protrudes between the vulvæ, and thus prevents rotation of the pessary on its long axis; or Gervis',^b in which the upper portion is broad and concave upwards, so as to receive the fundus, and prevent it falling off sideways; or Thomas's,^c the upper part of which is also broad, thick, and concave, with the same object, and also in order, by increasing the surface of support, to prevent the instrument causing pain by pressing against the tender fundus, while its lower branch is pointed, so that it may resist the tendency to rotation. Greenhalgh's pessary is constructed with an elastic cushion at its upper end, to prevent any pain or pressure against the fundus. Various other spring pessaries have been invented by other gynecologists with the same objects, one of which is now on the table, and a somewhat similar one was lately exhibited to the members of this Society by an eminent American practitioner, Dr. Beverley Cole.^d Indeed so much are these supposed defects of Hodge's pessary felt, that almost every gynecologist has introduced a special modification of his own.

Now, if we compare this plate (Fig. 3) with the one representing the normal position of the uterus according to Fritsch (Fig. 2), two obvious faults are at once apparent in this method of treatment—first, the uterus has never been replaced at all; and, second, the pessary is supposed to keep the uterus in its place by direct pressure on the fundus.

Here again it is Professor Schultze to whom we are indebted for having exposed these faults, and, at the same time, demonstrated the true principle on which posterior displacements of the uterus should be treated. This, shortly expressed, consists in first replacing the uterus in a position of exaggerated anteversion, and then fixing *the cervix* posteriorly by means of a pessary. The replacement of the uterus, he maintains, should always be effected by the bimanual method, and not by the use of the sound. In this point Professor Fritsch does not agree with him, as he contends that the essential point is to replace the uterus thoroughly, the exact method adopted being comparatively immaterial. The reposition of the retroflexed or retroverted uterus by the bimanual method illustrates, however, so fully the whole theory of this treatment, that I have had Professor Schultze's plates enlarged, and by their aid I hope to be able to make my description of the method intelligible to all present.

^a Loc. cit. P. 243.

^b Obst. Trans. Vol. XXIII., p. 34.

^c Diseases of Women. P. 419.

^d Obst. Trans. Vol. XXIII., p. 238.

The bladder being emptied, and the woman placed in the dorsal position, two fingers of the right or left hand (the left is the one represented in the figure) are inserted into the vagina (Fig. 4). With them steady pressure is made against the fundus, which is situated in the posterior *cul-de-sac* (where the star is placed in the diagram), so as to raise it upwards to one or other side of the sacrovertebral angle. Pressure is then made by the fingers of the other hand over the abdomen, a little above the umbilicus, so as to force the fundus downwards and forwards into a position of exaggerated anteversion (Fig. 5). When in this position the intra-abdominal pressure falls on the posterior surface of the fundus, and presses it against the symphysis pubis. If we can now, by means of a pessary, prevent the cervix sinking downwards and forwards, the case is cured.



Fig. 4. Bimanual Reposition of the Uterus. First movement (Schultze).

With this latter object Professor Schultze has invented a figure of 8 pessary, one of which I now show you. When the instrument is *in situ* the smaller ring of the 8 lies in the posterior *cul-de-sac*, and into it is inserted the cervix uteri. Any tendency the latter may have to pass downwards and forwards is impossible as long as it remains within the ring of the pessary. When the cervix is very short he uses another form of pessary, but whatever pessary is introduced the object of it is to fix the cervix posteriorly, and not to press directly on the displaced fundus.

Are we, then, to discard altogether the use of Hodge's pessary? Far

from it; for in a large number of cases, having once placed the uterus in a position of exaggerated anteversion, we can fix the cervix posteriorly by means of Hodge's pessary quite as effectually as by one of Schultze's. In order to do this we must choose one long enough to put the posterior *cul-de-sac* on the stretch, and so prevent the cervix passing downwards and forwards. The anterior end of the pessary should just be able to move freely behind the pubes, and, making a bimanual examination, the bladder being empty, we should be able to feel the fundus lying in the anterior *cul-de-sac*, the top of it almost touching the pubes (Fig. 5). The longer the posterior *cul-de-sac* the further backward we can fix the cervix, and consequently the more stable will be the anteversion. Hence, also, the pessary should never distend the vagina transversely, as this would naturally tend to shorten the vagina. Indeed, it is in cases of very short vagina and shallow posterior *cul-de-sac* that we will most frequently fail in thus effecting a cure. Whether in such cases a Schultze's figure of 8 pessary will succeed after a Hodge's has failed, I am unable to say from my own experience.

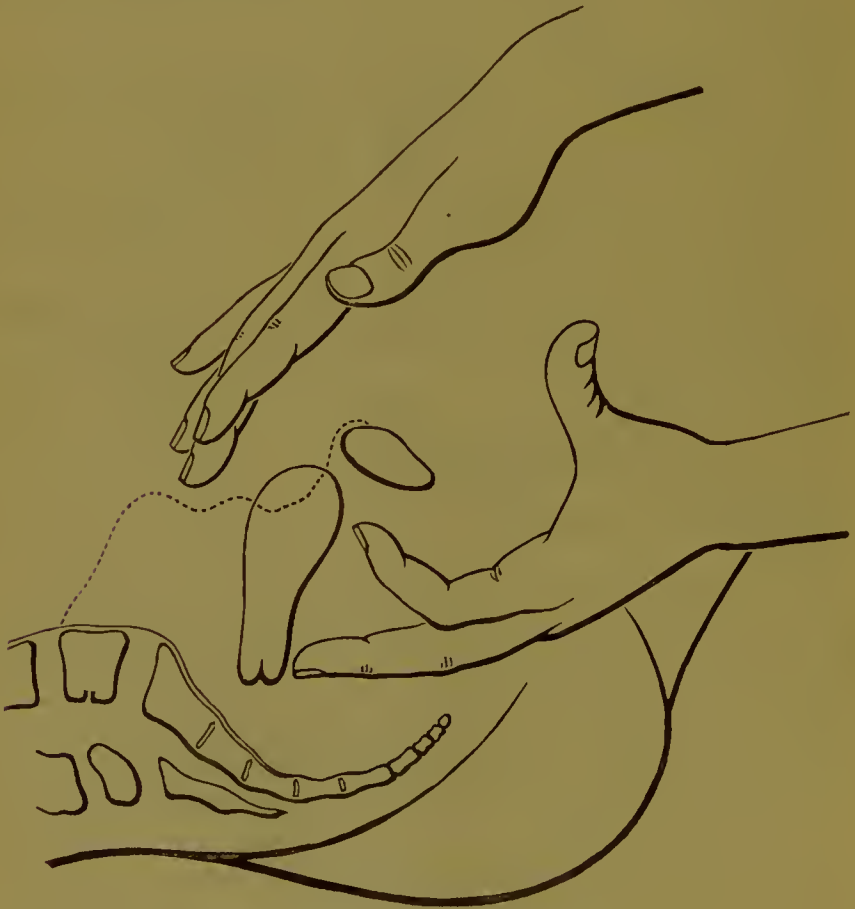


Fig. 5. Bimanual Reposition of the Uterus. Second movement (Schultze)

As to version, the treatment of retroversion differs in no way from that of retroflexion, except that we will probably also have to treat the chronic metritis on which the non-flexibility of the uterus chiefly depends.

The following is a brief statement of the conclusions at which I have arrived:—

1. The normal position of the uterus when the bladder is empty is one of ante flexion. Hence mechanical treatment of ante flexion is rarely called for, and if symptoms be present our efforts should generally be directed to the cure of the complications.

2. In retroflexions or versions the primary indication is to treat the displacement. In order to do this effectually we should place the uterus in a position of exaggerated anteversion, and then fix the cervix posteriorly by a pessary.

3. Hodge's pessary, or any other pessary used for the cure of retroflexion, when uncomplicated with adhesions, should act by fixing the cervix posteriorly, and not by pressing against the fundus and elevating it.

4. Versions are, so far, more serious than flexions, in that they are caused by rigidity of the uterine parenchyma, which is generally due to chronic metritis.

5. To make the results of the bimanual examination of any use for comparison with the results of other observers it must be made in the dorsal position, the bladder having been previously emptied.

6. A great deal of the confusion that exists about the treatment of anterior and posterior displacements originates in its being taken for granted that any treatment that is found suited to an anterior displacement must be equally suited to a posterior one, and *vice versâ*.

I have not ventured in this paper to enter on the consideration of the treatment of posterior displacements when complicated with fixation of the fundus, as I feel I have already trespassed more than enough on your time and patience, but I hope to be able to bring this part of the subject at some future time under the notice of the Society.

